

## **SCIENCE, MEDICINE AND SOCIETY IN LATIN AMERICA AND THE CARIBBEAN.**

Spring 2001.

Center of Latin American and Caribbean Studies.

New York University

53 Washington Square South, 4W

New York, NY 10012

Office: (212) 998-8685

FAX: (212) 995-4163

Visiting Professor: Marcos Cueto

This graduate seminar that will deal with the origins and spread of western science, medicine and technology in Latin America and the Caribbean. Discussions will emphasize the reception, adaptation, response and hybridization of knowledge by local cultures and elites. The course will also seek: to compare Latin America with other regions of the "third world", to examine the social and cultural contexts in which medical ideas and practices have evolved; to study the use of science and medicine by empires; to analyze the role played by nationalistic ideologies and by the State, and to evaluate scientific and technical change from the perspective of the so-called periphery. The course will be based in historical and anthropological readings. Readings include a consideration of various models and theories concerning the relationship that was established between science in western centers (the metropolis) and in what became colonies and other economic and political dependencies. Special attention will be given to the notions of cultural diffusion, dependency, colonialism, imperialism, and resistance. The course runs on Wednesdays between 6:10 and 8:10 pm.

### **ASSESSMENT**

Evaluation will be as follows: (1) review reading assignments in brief but critical (1-page) weekly papers, which will provide the basis for your contributions to discussion (2) make at least one presentation, based on a 10-page paper to be handed in during the term (3) submit a 20-page paper by the end of the term.

Students must choose a research subject for their semester work that can either be an in-depth study in the history of science, technology or medicine in Latin America in a certain country or a cross-country discussion in a relevant issue. Students must hand in and discuss with the teacher an outline of the paper before the Spring break.

Possible topics might include: Models of scientific development. Precolumbian legacies. The characteristics of colonial Science. Science and nationalism. The consolidation of research groups. Science and Imperialism. International cooperation. The role of the Rockefeller Foundation. Science and social control. Present challenges of medicine and science in Latin America.

There will be no incompletes on this course. if you are having trouble meeting deadlines, speak to us as soon as possible.

## TEXTBOOK AND READINGS

The prescribed books are:

Marcos Cueto. Missionaries of Science: The Rockefeller Foundation and Latin America. Bloomington: Indiana Univ. Press, 1994.

Paul Farmer. AIDS and Accusation: Haiti and the Geography of Blame Berkeley: Univ. of California Press, 1993.

Julyan Peard. Race, Place and Medicine, the Idea of the Tropics in Nineteenth-century Brazilian Medicine. Durham: Duke Univ. Press, 1999.

Nancy Leys Stepan. The Hour of Eugenics: Race, Gender and Nation in Latin America. Itaca: Cornell Univ. Press, 1991

The readings for each week should also be consulted. The attached bibliography contains references that should assist you in your research work for this course and elsewhere.

### **Week One. 17 January.**

#### **Visions of science and development. Diffusion, periphery, imperialism and adversity.**

Paolo Palladino y Michael Worboys, "Science and Imperialism." Isis 84 (1993): 91-102.

Chambers, David W. "Locality and science: myths of centre and periphery," en Mundialización de la ciencia y la cultura nacional A. Lafuente y M.L. Ortega, eds., (Madrid: Doce Calles, 1993), pp. 605-619.

Cueto, Marcos. "Science under adversity: Latin American medical research and American private philanthropy, 1920-1960." Minerva 1997, 35: 233-245.

Basalla, George. "The Spread of Western Science." Science 156 (1967): 611-622.

Glick, Thomas. "Science and Society in Twentieth-Century Latin America," The Cambridge History of Latin America, Volume VI, Part I, 1930 to the Present (Cambridge, Cambridge University Press, 1994), pp. 463-535; reprinted in Leslie Bethell, ed., Ideas and Ideologies in Twentieth Century Latin America (Cambridge, 1996), pp. 287-359.

### **Week Two. 24 January.**

## **Precolumbian traditions**

Joseph W. Bastien, "Qollahuaya-Andean Body Concepts: A Topographical –Hydraulic Model of Physiology." American Anthropologist 87 (1985): 595-611

George M. Foster, "on the Origin of Humoral Medicine in Latin America." Medical Anthropology Quarterly 1 (1987): 355-399

Joseph W. Bastien, "Differences between Kallawayaya-Andean and Greek European Humoral Medicine." Social Science and Medicine 28 (1989): 45-51

Salomon, Frank. "Shamanism and politics in Late-colonial Ecuador." American Ethnologist 10 (1983): 413-428.

Crosby, Alfred. *The Columbian Exchange: Biological and cultural consequences of 1492* Westport: Greenwood Press, 1972.

## **Week Three. 31 January.**

### **Colonial Science and Medicine.**

Esguerra, Jorge Cañizares. *Spanish America: From Baroque to Modern Colonial Science*. To appear in the Eighteenth Century Volume of the Cambridge History of Science. Roy Porter, volume ed., Ronald Numbers and David Lindberg, general eds. (Cambridge University Press, 1999).

Jorge Cañizares Esguerra, "New World, New Stars: Patriotic Astrology and the Invention of Indian and Creole Bodies in Colonial Spanish America, 1600-1650," The American Historical Review (AHR), 104 (February 1999), 33-68.

Angela T. Thompson, "To save the children: smallpox inoculation, vaccination, and public health in Guanajuato, Mexico, 1797-1840" The Americas XLIX 4 (1993): 431-455

Suzanne Austin Alchon. Native Society and Disease in Colonial Ecuador Cambridge: Cambridge Univ. press, 1991.

Cooper, Donald. Epidemic Disease in Mexico City Austin: Univ. of Texas Press, 1965.

## **Week Four. 7 February.**

### **Continuities and discontinuities during the early 19th CENTURY**

Thomas F. Glick, "Science and Independence in Latin America," Hispanic American Historical Review 71 (1991): 307-334

Murdock, Carl J. Physicians, the state and public health in Chile, 1881-1891 Journal of Latin American Studies 27 (1995): 551-567.

David Wade Chambers, "Period and Process in Colonial and National Science." In: Scientific Colonialism, a cross.cultural comparison. Nathan Reingold and Marc Rothenberg (eds) Washington D.C.: Smithsonian Institution Press, 1987. Pp. 297-323.

Lewis Pyenson, "Functionaries and Seekers in Latin America, Missionary Diffusion of the Exact Science, 1850-1930." Quipu (1985) 387-420

Reber, Vera Blin. "Blood, coughs and fever: tuberculosis and the working class of Buenos Aires, Argentina, 1885-1915." Social History of Medicine 12: 1 (1999): 73-100.

### **Week Five. 14 February.**

#### **National and popular traditions in the 19<sup>th</sup> century**

Julyan Peard. Race, Place and Medicine, the Idea of the Tropics in Nineteenth-century Brazilian Medicine. Durham: Duke Univ. Press, 1999.

Chalhoub, Sidney. "The Politics of Disease Control: Yellow Fever and Race in Nineteenth Century Rio de Janeiro." Journal of Latin American Studies 25: 5 (1993): 441-463

### **Week Six. 21 February. ,**

#### **Tropical Medicine in the Americas**

Worboys, Michael 'Tropical Diseases', in W.F. Bynum & R. Porter (eds.), Companion Encyclopaedia of the History of Medicine (London: 1993), 512-536.

Cueto, Marcos. "Tropical medicine and bacteriology in Boston and Peru: Studies of Carrión's disease in the early 20th century." Medical History 40 (1996): 344-364.

Löwy, Ilana. Yellow fever in Rio de Janeiro and the Pasteur Institute Mission (1901-1905): The transfer of science to the periphery. Medical History 34 (1990): 144-163.

Nancy Stepan. "The interplay between socioeconomic factors and medical science: Yellow fever in Cuba and the United States" Social Studies of Sience 8 (1978): 297-424.

### **Week Seven. 28 February.**

#### **National Traditions in Science**

Cueto, Marcos. Andean biology in Peru: Scientific styles on the periphery. *Isis*: 1989, 80: 640-658.

Cueto, Marcos. "Laboratory styles and Argentine physiology." *Isis* 85 (1994): 228-246.

Nancy Stepan. Beginnings of Brazilian Science: Oswaldo Cruz, Medical Research and Policy, 1890-1920 (New York: Science History Publications, 1976) .

Abel, Christopher. Health Hygiene and Sanitation in Latin America c. 1870 to 1950. Univ. of London, Institute of Latin American Studies, Research Papers, 42 1996.

## **Week Eight. 7 March**

### **Medicine and the Rockefeller Foundation**

Christopher Abel. "External Philanthropy and domestic change in Colombian Health Care: the role of the Rockefeller Foundation, ca 1920-1950." Hispanic American Historical Review 75:3 (1995): 339-376

Birn, Anne-Emanuelle and Armando Solorzano "Public health policy paradoxes: science and politics in the Rockefeller Foundation's hookworm campaign in Mexico in the 1920s" Social Science and Medicine 49 (1999): 1197-1213

Birn, Anne-Emanuelle and Armando Solorzano "The hook of hookworm: public health and the politics of eradication in Mexico." Western medicine as contested knowledge. Andrew Cunningham ed Manchester: St.Martin Press, 1997 pp. 147-171.

Birn, Anne-Emanuelle. "A revolution in rural health? The struggle over local health units in Mexico, 1928-1940." Journal of the History of Medicine and Allied Sciences 53 (1998): 43-76.

## **14 March. Spring Break.**

## **Week Nine. 21 March.**

### **Science, Agriculture and the Rockefeller Foundation**

Vessuri, Hebe M.C. "Foreign scientists, the Rockefeller Foundation and the origins of agricultural science in Venezuela." Minerva 32 (1994): 267-296.

Fitzgerald, Deborah. Exporting American agriculture: The Rockefeller Foundation in Mexico, 1943-53. In Cueto, ed., Missionaries of Science, pp. 72-96.

Joseph Cotter. "The Rockefeller Foundation's Mexican Agricultural Project: A cross cultural encounter, 1943-1949." In Cueto, ed. Missionaries of Science

Thomas Glick. "The Rockefeller Foundation and the Emergence of Genetics in Brasil, 1943-1960." In Cueto ed. *Missionaries of Science* pp. 149-164.

### **Week Ten. 28 March.**

#### **Popular traditions of science and medicine**

Nancy Leys Stepan 'The Hour of Eugenics': race, gender and nation in Latin America (new York: Science History Publications, 1996)

Alexandra Stern. *Mestizophilia, biotypology and eugenics in post-revolutionary Mexico: towards a history of science and the state, 1920-1960.* Working Papers Series No 4. Mexican Studies Program, Center for Latin American Studies, University of Chicago.

Cueto, Marcos. "Indigenismo and rural medicine in Peru: the indian sanitary brigade and Manuel Nuñez Butrón" *Bulletin of the History of medicine* 65 (1991): 22-41

Leonard, Jonathan. "Research in the Argentine Outback: The Health Ques of Salvador Mazza." *Bulletin of the Pan american Health Organization* 26: 3 (1992): 256-270.

### **Week Eleven. 4 April.**

#### **Social Control, Gender and Sexually Transmitted Diseases**

Teresa Mead, *Cultural Imperialism in old republic rio de janeiro The Urban renewal and public health project in teresa mead and mark walker (eds,) science, medicine and cultural imperialism* (New York: St. Martin Press, 1991): 95-119.

Donna Guy "White Slavery, public health and the socialist position on legalized prostitution in Argentina, 1913-1936" *Latin American Research Review* 23:3 (1988): 60-80.

Katherine Bliss "The Science of Redemption: Syphilis, sexual promiscuity and reformism in revolutionary mexico." *Hispanic American Historical review* 79: 1 (1999): 1-40

Ruggiero, Kristin. "Honor, maternity and the disciplining of women: infanticide in Late 19<sup>th</sup>-century Buenos Aires." *Hispanic American Historical Review* 72 (1992): 353-374.

### **Week Twelve. 11 April.**

#### **Science and the State**

Hebe Vessuri, "The Universities, scientific research and the national interest in Latin America," *Minerva* 24 (1986): 1-38

Vessuri, H.. Bitter Harvest. The Growth of a Scientific Community in Argentina. En: J.Gaillard, V.V.Krishna and R.Waast (Eds.) Scientific Communities in the Developing World. Part 3: Scientific Communities in Latin America, pp.307-335. Sage Publications, Nueva Delhi/Thousand Oaks/London, 1996.

Vessuri, Hebe M.C. The search for a scientific community in Venezuela: From isolation to applied research. Minerva 22 (1984): 196-235.

Jacqueline Fortes and Larissa Lomintz. Becoming a scientists in Mexico, the challenge of creating a scientific community in an underdeveloped country (University Park, PA Penn State University Press, 1994.

### **Week Thirteen. 18 April.**

#### **AIDS, popular perceptions of disease and health policies**

Paul Farmer. AIDS and Accusation: Haiti and the Geography of Blame Berkeley: Univ. of California Press, 1993.

Briggs, Charles L.; Briggs, Clara Mantini. "The Indians accept death as a normal, natural event: institutional authority in a Venezuelan cholera epidemic." Social Identities 3: 3 (1997): 439-469.

Scheper-Hugher, Nancy. Death without weeping, the violence of everyday life in Brasil. Berkeley: University of California Press, 1992.

### **Week Fourteen. 25 April**

#### **Present and future challenges**

Vessuri, Hebe. "O inventamos o erramos" The power of science in Latin America. World Development, 18 (11):1543-1553, 1990

Vessuri, Hebe. "Science for the south in the south: exploring the role of local leadership as a catalyst of scientific development." In: Shinn, Terry ed. Science and technology in a developing world. s.l, Kluwer Academic Publishers, 1997. p.299-321

Patrick Peritore and Ana Karina Gave-Peritone. Biotechnology in Latin America: politics, impacts and risks. Wilmington Scholarly resources, 1995.

Schwartzman, Simon. A Space for Science: The Development of the Scientific Community in Brazil (University Park: Pennsylvania University Press, 1991)